

19-7814.



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

D5638-2**Job Sheet 200863****Part No:** D5638-2**Job Qty:** 8 pcs**Part Name:** Saddle, Outboard, RH**Part Weight:** 0 lbs**Status:** New**Priority:** Medium**Job Created:** 9/18/19**Job Tracking No:****Due Date:** 10/4/19**Created By:** Marie Lajeunesse**Type:** Stock**Description:****Note:** DWG D5638 REV.A IPP REV.A NEW ISSUE 19/02/06 JFS VERIFIED BY:DD**Ship Via:****Bill of Materials****Job Routing**

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
100	Machining - Issue SN	8 pcs	10/4/19		0.00	0.00	HAAS - 1		
							HAAS - 2		
							HAAS - 3		SBL 19/11/23
							HAAS - 4		
110	HAAS 4 Axis - B4B	8 pcs	10/4/19		3.00	8.89	HAAS - 1 - B4B		
							HAAS - 2 - B4B		
							HAAS - 3 - B4B		SBL 19/11/23
							HAAS - 4 - B4B		
120	QC 2	8 pcs	10/4/19		0.00	0.00	QC 2 - 1		
							QC 2 - 12		
							QC 2 - 14		
							QC 2 - 17		
							QC 2 - 19		
							QC 2 - 2		
							QC 2 - 20		
							QC 2 - 22		
							QC 2 - 23		
							QC 2 - 25		
							QC 2 - 32		
							QC 2 - 33		
							QC 2 - 35		
							QC 2 - 39		
							QC 2 - 4		
							QC 2 - 40		
							QC 2 - 44		
							QC 2 - 45		
							QC 2 - 48		
							QC 2 - 49		
							QC 2 - 50		
							QC 2 - 51		
							QC 2 - 52		

**Container No:** S234281**Part:** D5638-2**Job No:** 200863**Serial No/Batch:** S234281**Revision:** A**Inspector:****Exp Date:****Instructions:** Various STC's

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Date: 11/23/19

130 QC 8	8 pcs	10/4/19	0.00 0.00	QC 2 - 57	SB2 19/11/23
				QC 2 - 62	
				QC 2 - 63	
				QC 2 - 8	
				QC 2 - 66	
				QC 2 - 64	
				QC 2 - 65	
				QC 2 - 5	
				QC 2 - 71	
				QC 2 - 73	
				QC 2 - 69	
				QC 8 - 12	
				QC 8 - 14	
				QC 8 - 17	
				QC 8 - 20	19-11-26
				QC 8 - 25	
				QC 8 - 3	
				QC 8 - 32	
				QC 8 - 33	
				QC 8 - 35	
				QC 8 - 39	
				QC 8 - 4	
				QC 8 - 44	
				QC 8 - 45	
				QC 8 - 49	
				QC 8 - 58	
				QC 8 - 8	
				QC 8 - 9	
				QC 8 - 68	
				QC 8 - 67	
				QC 8 - 1 (A)	
				QC 8 - 47	
				QC 8 - 40	
				QC 8 - 52	
				QC 8 - 23	
				QC 8 - 57	
				QC 8 - 76	
140 Handfinish - 1-1 Chemical-B4B	8 pcs	10/4/19	0.00 1.00	Handfinish - 1 - 1 - B4B	
				Handfinish - 1 - 2 - B4B	
				Handfinish - 1 - 3 - B4B	NOV 29 2019
				Handfinish - 1 - 4 - B4B	
				Handfinish - 1 - 5 - B4B	
				Handfinish - 1 - 6 - B4B	
				Handfinish - 1 - 7 - B4B	
				Handfinish - 1 - 8 - B4B	
				Handfinish - 1 - 9 - B4B	
				Handfinish - 1 - 10 - B4B	
				Handfinish - 1 - 11 - B4B	
				Handfinish - 1 - 12 - B4B	
				Handfinish - 1 - 13 - B4B	
				Handfinish - 1 - 14 - B4B	
				Handfinish - 1 - 15 - B4B	
				Handfinish - 1 - 16 - B4B	

					Handfinish - 1 - 17 - B4B	
					Handfinish - 1 - 18 - B4B	
					Handfinish - 1 - 19 - B4B	
					Handfinish - 1 - 20 - B4B	
					Handfinish - 1 - 21 - B4B	
					Handfinish - 1 - 22 - B4B	
150 QC 7	8 pcs	10/4/19	0.00	0.00	QC 7 - 10	
					QC 7 - 13	
					QC 7 - 14	
					QC 7 - 15	
					QC 7 - 17	
					QC 7 - 18	
					QC 7 - 19	
					QC 7 - 2	
					QC 7 - 28	
					QC 7 - 3	
					QC 7 - 30	
					QC 7 - 34	
					QC 7 - 36	
					QC 7 - 37	
					QC 7 - 41	
					QC 7 - 47	
					QC 7 - 48	
					QC 7 - 51	
					QC 7 - 58	
					QC 7 - 59	
					QC 7 - 60	
					QC 7 - 9	
					QC 7 - 68	
					QC 7 - 50	
					QC 7 - 67	
					QC 7 - 40	
					QC 7 - 24	
					QC 7 - 43	
					QC 7 - 61	
					QC 7 - 81	
					QC 7 - 76	
152 Spray Paint - 2 - B4B	8 pcs	10/4/19	0.00	4.00	Spray Paint - 1 - B4B	DAS 41 DEC 02 2019 9-89
					Spray Paint - 2 - B4B	
					Spray Paint - 3 - B4B	
					Spray Paint - 4 - B4B	
154 QC 14	8 pcs	10/4/19	0.00	0.00	QC 14 - 15	
					QC 14 - 2	
					QC 14 - 34	
					QC 14 - 41	
					QC 14 - 51	
					QC 14 - 58	
					QC 14 - 59	
					QC 14 - 9	
					QC 14 - 68	
					QC 14 - 40	
					QC 14 - 19	
					QC 14 - 43	
					QC 14 - 24	

160 Packaging 3-1 - Stock - B4B

8
pcs

10/4/19

0.00 0.00

QC 14 - 61

QC 14 - 81

DEC 17 2019

Packaging 3 - 1 - B4B

Packaging 3 - 2 - B4B

Packaging 3 - 3 - B4B

Packaging 3 - 4 - B4B

Packaging 3 - 5 - B4B

Packaging 3 - 6 - B4B

Packaging 3 - 7 - B4B

Packaging 3 - 8 - B4B

Packaging 3 - 9 - B4B

Packaging 3 - 10 - B4B

Packaging 3 - 11 - B4B

Packaging 3 - 12 - B4B

Packaging 3 - 13 - B4B

Packaging 3 - 14 - B4B

Packaging 3 - 15 - B4B

Packaging 3 - 16 - B4B

Packaging 3 - 17 - B4B

Packaging 3 - 18 - B4B

Packaging 3 - 19 - B4B

Packaging 3 - 20 - B4B

Packaging 3 - 21 - B4B

Packaging 3 - 22 - B4B

Packaging 3 - 23 - B4B

Packaging 3 - 24 - B4B

Packaging 3 - 25 - B4B

Packaging 3 - 26 - B4B

Packaging 3 - 27 - B4B

Packaging 3 - 28 - B4B

Packaging 3 - 29 - B4B

Packaging 3 - 30 - B4B

Packaging 3 - 31 - B4B

Packaging 3 - 32 - B4B

Packaging 3 - 33 - B4B

Packaging 3 - 34 - B4B

Packaging 3 - 35 - B4B

Packaging 3 - 36 - B4B

DAS
28
9-89

170 QC 21 - SA

8
pcs

10/4/19

0.00 0.00

QC 21 - SA - 21

QC 21 - SA - 70

QC 21 - SA - 53

DAS
21
7-89

DEC 20 2019

Part Op 110 - 1-Machine per folio FC511 DWG REV: A FOLIO REV: A 2- Deburr and break all sharp edges

Descriptions: 120 - (QC2- Inspect parts off machine FAI/FAIB)

130 - (QC8- Inspect parts - second check)

140 - (Chemical Conversion Coat per QSI005 4.1)

150 - (QC7-Inspect Chemical Conversion Coat)

152 - PRIME PER DART QSI 005 4.2.1.3.3 (FLOAT SKIDTUBE PRIMER) BATCH: 5200299 PAINT GLOSS BLACK

PER DART QSI 005 4.2.2.4 (FLOAT SKIDTUBE PAINT) BATCH: 5210053

154 - (QC14- Inspect Spray Paint)

160 - (Identify as per dwg & Stock Location: _____)

170 - (QC21- Final Inspection - Work Order Release)

ST 405

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
D6101-003	Saddle Billet, 7075	8 pcs (1 ea)	100-Machining - Issue SN	<u>5228 045</u>

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
100-Machining - Issue SN	D6101-003	8	42	0

Part Specifications

Specifications could not be found.

Plex 9/18/19 11:29 AM Dart.lajeunesse.marie

DART AEROSPACE LTD		Work Order: 200 863
Description: SADDLE OUTBOARD		Part Number: D5638-2
Inspection Dwg: D5638	Rev: A	DSK: Rev: Page 1 of 2

FIRST ARTICLE INSPECTION DIMENSION SHEET

Dim	Min	Max	Go/No Go Gauge	Record Actual Dimensions				
				1	2	3	4	5
A	256	263		257	258	258	258	258
B	110	130		123	120	120	120	122
C	R, 350	R, 410		375	375	375	375	375
D	110	130		123	120	120	120	120
E	1,870	1,880		1,875	1,875	1,875	1,875	1,875
F	1,870	1,880		1,875	1,875	1,875	1,875	1,875
G	635	645		637	638	638	638	638
H	1,395	1,405		1,400	1,400	1,400	1,400	1,400
I	1,395	1,405		1,400	1,400	1,400	1,400	1,400
J	241	261		247	247	247	247	247
K	02x45°	08x45°		049x45°	050x45°	050	050	047
L	1,565	1,585		1,575	1,575	1,575	1,575	1,575
M	490	510		500	502	501	500	501
N	213	233		221	221	221	221	221
O	113	133		121	121	121	121	120
P	110	130		118	117	116	116	116
Q	675	695		687	690	685	685	690
R	1,125	1,145		1,135	1,135	1,135	1,135	1,135
S	1,346	1,366		1,355	1,353	1,353	1,353	1,353
T	5,990	6,010		5,996	5,998	5,998	5,998	5,998
U	1,090	1,110		1,103	1,105	1,104	1,100	1,100
V	990	1,010		1,000	1,001	1,000	1,000	1,000
W	490	510		500	501	501	501	501
X	1,245	1,255		1,250	1,250	1,250	1,250	1,250
Y	2,495	2,505		2,500	2,500	2,500	2,500	2,500
Z	1,245	1,255		1,250	1,250	1,250	1,250	1,250
AA	2,313	2,328		313	313	313	313	313
AB	1,510	1,515		1,513	1,512	1,512	1,512	1,512
AC	2,235	2,240		2,236	2,237	2,237	2,236	2,237
AD	0,02x45°	0,08x45°		0,046x45°	0,052	0,050	0,051	0,050
AE	1,115	1,135		1,126	1,126	1,126	1,126	1,126
AF	1,110	1,130		1,115	1,115	1,116	1,115	1,116
AG								
AH								
Accept/Reject								

Measured by: SBL	Date: 19/11/24
Audited by: DAS	Date: 19-11-26
Preliminary Approval: 20	Date:

Rev	Date	Change	Revised by	Approved
A	02.12.12	New Issue	KJ/RF	
B	07.11.08	Reformat	KJ/JLM	
C	12.07.31	Prototype revised to preliminary	KJ	

DART AEROSPACE LTD		Work Order: 200 863
Description: SADDLE OUTBOARD		Part Number: D5638-2
Inspection Dwg: D5638	Rev: A	Page: 1 of 1

FIRST ARTICLE INSPECTION DIMENSION SHEET

Dim	Min	Max	Go/No Go Gauge	Record Actual Dimensions				
				1	2	3	4	5
A	256	263		258	258	258		
B	110	130		122	122	122		
C	R, 350	R, 410		375	375	375		
D	110	130		122	122	122		
E	1,870	1,880		1,875	1,875	1,875		
F	1,870	1,880		1,875	1,875	1,875		
G	635	645		638	638	638		
H	1,395	1,405		1,400	1,400	1,400		
I	1,395	1,405		1,400	1,400	1,400		
J	241	261		247	247	247		
K	02X45	08X45		050	050	050		
L	1565	1585		1,575	1,575	1,575		
M	490	510		501	501	500		
N	213	233		221	221	222		
O	113	133		121	121	121		
P	110	130		116	116	116		
Q	675	695		688	686	688		
R	1125	1145		1135	1135	1135		
S	1346	1366		1353	1353	1353		
T	5,990	6,010		5,998	5,998	5,998		
U	1,090	1,110		1,100	1,100	1,100		
V	990	1,010		1,000	1,000	1,000		
W	490	510		501	502	502		
X	1,245	1,255		1,250	1,250	1,250		
Y	2,495	2,505		2,500	2,500	2,500		
Z	1,245	1,255		1,250	1,250	1,250		
AA	2,313	2,318		313	312	313		
AB	510	515		512	512	512		
AC	235	240		237	239	239		
AD	0,02X45	0,08X45		050	0,048	050		
AE	115	135		126	126	126		
AF	110	130		117	117	116		
AG								
AH								
Accept/Reject								

Measured by: SBC	Date: 19/11/24
Audited by: DAS	Date: 19-11-24
Preliminary Approval: 20	Date:

Rev	Date	Change	Revised by	Approved
A	02.12.12	New Issue	KJ/RF	
B	07.11.08	Reformat	KJ/JLM	
C	12.07.31	Prototype revised to preliminary	KJ	

Entered: 26 Date: Dec 31/19



NCR No. 19-7814

WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

Route update only ☐

Job: <u>260863</u> Part No. <u>D5638-2</u>		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☒		DEPARTMENT/PROCESS Skid-tube ☐ Machining ☒ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Eng. (Non-AW) ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Engineering ☐ Water Jet ☐ Supplier ☐ Quality ☐																															
Date: <u>19/11/26</u>		Sequence #: <u>110</u>		QTY Affected: <u>1</u>		MRB (QSI042) <u>INSP</u> <u>12</u> <u>4</u> <u>19/11/26</u> Completed By <u>SBL</u> <u>4</u> <u>19/11/26</u> Lead hand / Supervisor <u>Jul</u> <u>19/11/28</u> QC / QA Coordinator <u>PD</u> <u>12-11-28</u>																													
Description Work Order Deviation				Disposition																															
Dim 0.235 ^{+0.005} _{-0.000} is 0.234 at one one side of the part.				Acceptable. Affected margins of safety of SR-D505-1057-1 are large and still positive																															
Root Cause Operator ☐ Manufacturing Process ☒ Equip/Tooling ☐ Handling/Presservation ☐ Material ☐ Product Improvement ☐ Process Improvement ☐ Human Factors ☐		FAULT CATEGORY <table border="0"> <tr> <td>☐ Pressure/Forced</td> <td>☐ Contamination</td> <td>☐ Power Loss/Surge</td> <td>☐ Positioned Wrong</td> </tr> <tr> <td>☐ Bending</td> <td>☐ Misaligned/off center</td> <td>☐ Folio/Program</td> <td>☒ Outside Tolerance</td> </tr> <tr> <td>☐ Crushing</td> <td>☐ BOM/Route</td> <td>☐ Grain Direction</td> <td>☐ Drawing</td> </tr> <tr> <td>☐ Cracks</td> <td>☐ Broken/Damage/Defect</td> <td>☐ Weld</td> <td>☐ Finish</td> </tr> <tr> <td>☐ Crimp/Kink/Ripple/Wave/Twist</td> <td>☐ Incomplete/Unclear Instructions</td> <td>☐ Wrong Stock Pulled</td> <td>☐ Part Lost/Missing</td> </tr> <tr> <td>☐ Marks/Chatter</td> <td>☐ Drill Holes</td> <td>☐ Out of Sequence</td> <td>☐ Misread</td> </tr> <tr> <td>☐ Mislabeled</td> <td>☐ Fit/Function</td> <td>☐ Off-set/Set-up</td> <td></td> </tr> </table>						☐ Pressure/Forced	☐ Contamination	☐ Power Loss/Surge	☐ Positioned Wrong	☐ Bending	☐ Misaligned/off center	☐ Folio/Program	☒ Outside Tolerance	☐ Crushing	☐ BOM/Route	☐ Grain Direction	☐ Drawing	☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Finish	☐ Crimp/Kink/Ripple/Wave/Twist	☐ Incomplete/Unclear Instructions	☐ Wrong Stock Pulled	☐ Part Lost/Missing	☐ Marks/Chatter	☐ Drill Holes	☐ Out of Sequence	☐ Misread	☐ Mislabeled	☐ Fit/Function	☐ Off-set/Set-up	
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Other/Details:																																			